PIONEER®

SERVICE INFORMATION No. SI-F84007
Date: February, 1984

MODEL: PR-7820

SUBJECT: OPTICAL PARTS CLEANING PROCEDURE

REASON: Cleaning the Optical System periodically (every two to three months or sooner, depending on usage) is one of the most important service points in maintaining the PR-7820 in top operating condition.

REQUIRED TOOLS & MATERIALS:

1. Lense Cleaning Fluid -- FREDN TF*
   (Available from: Chemtronics, Inc.
   Hauppauge, NY 11788)

2. Lense Cleaning Paper (Part No. GED-008)

3. Tip-Vented Tweezers (Pinset) (Fig.2) or Hemostats.

*This Liquid can only be used for cleaning optical components. Do Not use liquid for cleaning discs.

CLEANING PROCEDURE:

NOTE: Do Not clean or touch any Optical Components besides the ones listed in this procedure. (See Fig.1) Otherwise, it will result in damage to the Optical Component which will deteriorate the performance of the Optical System. Especially avoid any contact with the Mirror Transducer (even by blown air) as it will change the Neutral Point of the Transducer resulting in poor performance of the Optical System.

1. Optical Components to be Cleaned:

   . Focus Lens (bottom side only)
   . Laser Tube (output)
   . First, Second and Third Fixed Mirror
   . 1/4 Wave Plate (outside only)
   . Prism (3 sides only)

   (See Fig.1 on reverse page)

(Please turn over)

POST OFFICE BOX 1760
LONG BEACH, CALIFORNIA 90801
PHONE 213/420-5700 FAX (213)420-5902

PIONEER ELECTRONICS (USA) INC.
TECHNICIAL INFORMATION CENTER

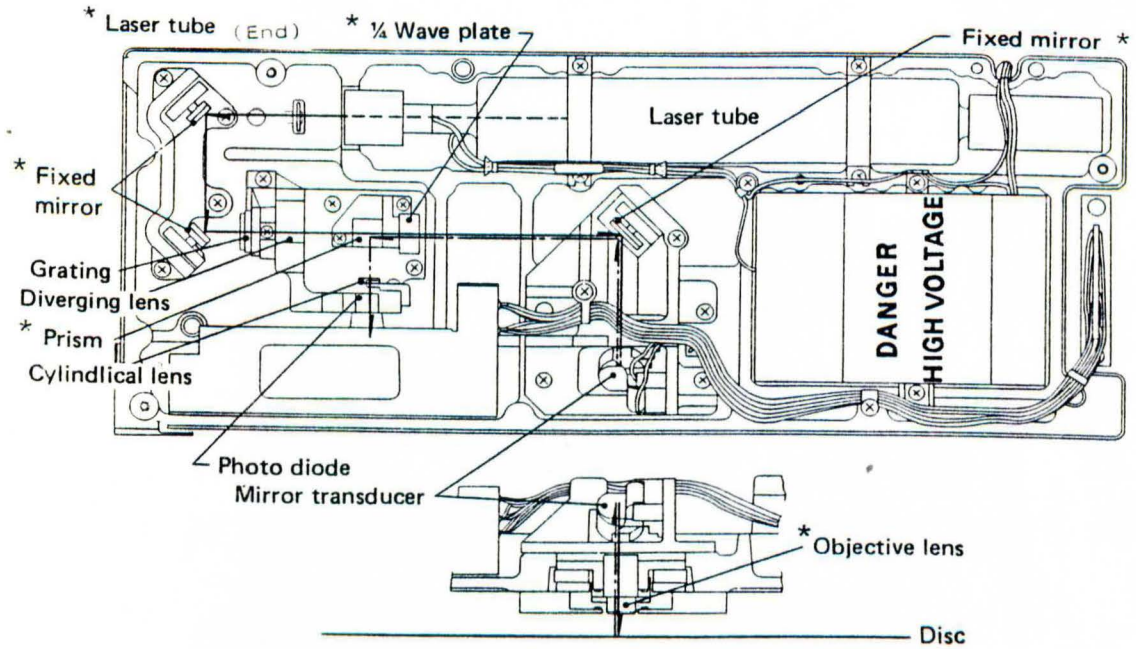
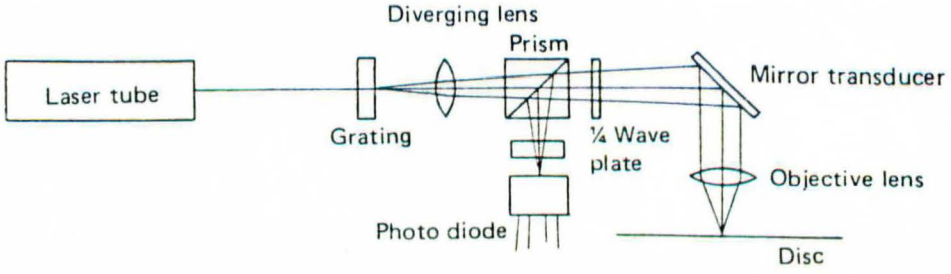


FIG 1

*Indicates only the Optical Components to be cleaned.



2. Disassembly: Remove the Top Cover, Mechanical Panel, Optical Platform Cover and Shield Cover, as shown in Fig. 3.

. Hood and Top Plate

1. Remove the two screws (1) and connector to detach the top cover.
2. Remove the four screws (2) to detach the mechanical panel.
3. Remove the three screws (3) to detach the platform cover.
4. Remove the seven screws (4) to detach the shield cover.
   (Remove the Platform Cover and Shield Cover at the same time to avoid tearing the Shielding Sheet.)

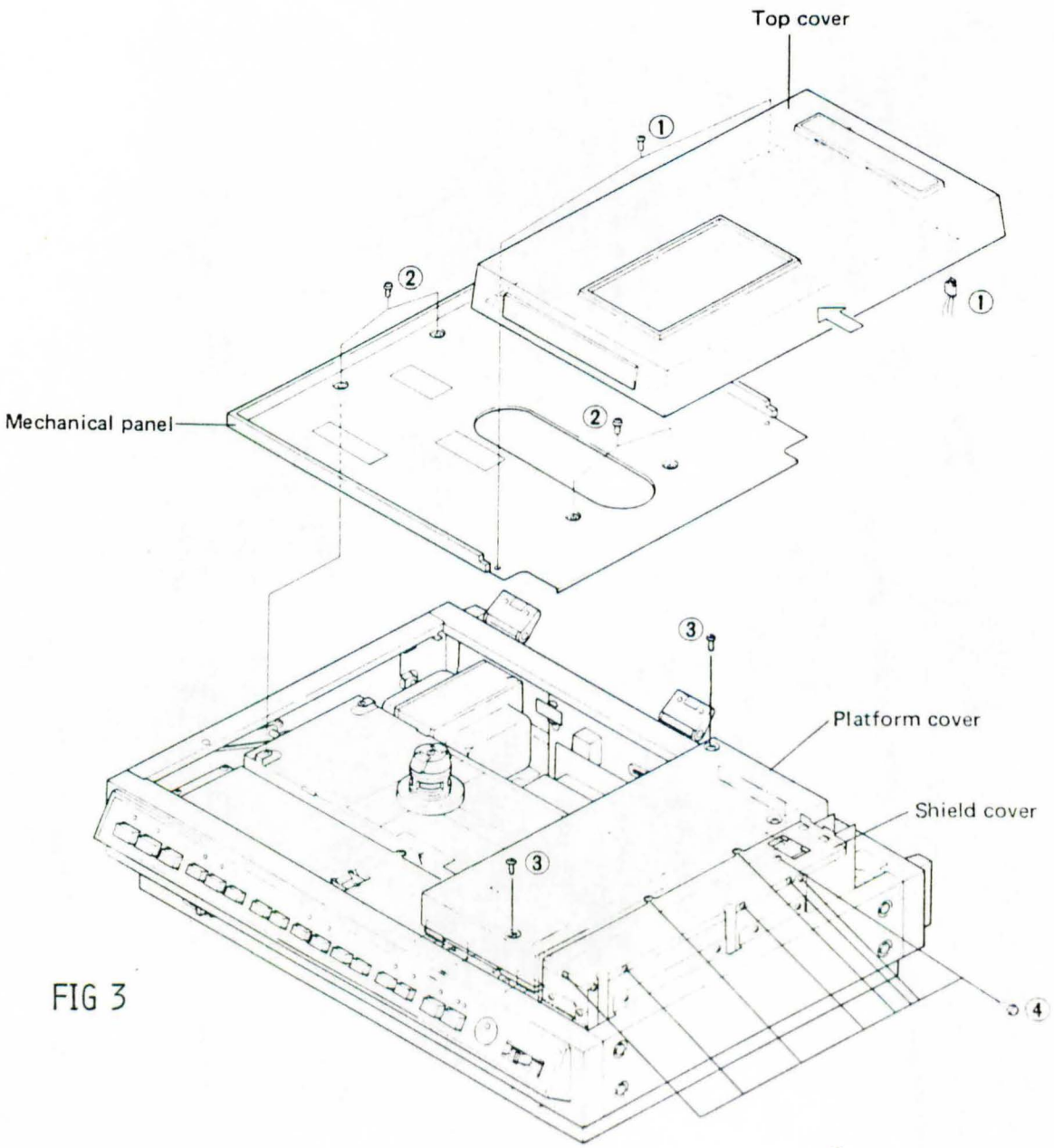


FIG 3

3. Procedure:

a. Turn POWER ON and wait one or two minutes for the focus motor (objective lens) position to stabilize.

b. Firmly wrap a strip of cleaning paper (GED-008) around the tip of the tip-vented tweezers and bend the tip of the paper upward. (See Fig.2)

c. Apply a small amount of cleaning liquid to the tip of the cleaning paper.

d. Insert the cleaning paper using the place where the center of the red laser beam becomes a spot (see Fig.4) to determine the correct location.

e. Raise the tip of the cleaning paper gently upward at the point where the spot of the laser beam strikes it to clean the surface of the lens. If the cleaning paper is in proper contact with the lens, you should feel it sliding across the lens. Always clean the lens in a circular motion from inside to outside.

f. Turn POWER OFF and wait one or two minutes until the high voltage sections have discharged.

g. Clean the outlet of the laser tube, the first, second and third fixed mirrors, the 1/4 wave plate and prism by the same circular motion with a new sheet of lens cleaning paper each time. Never clean more than one optical component with same lens paper.

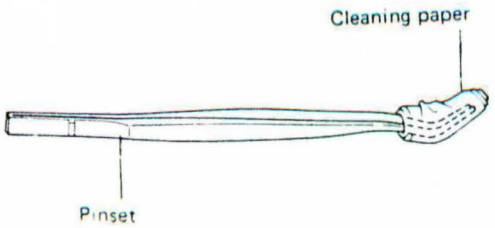


FIG 2

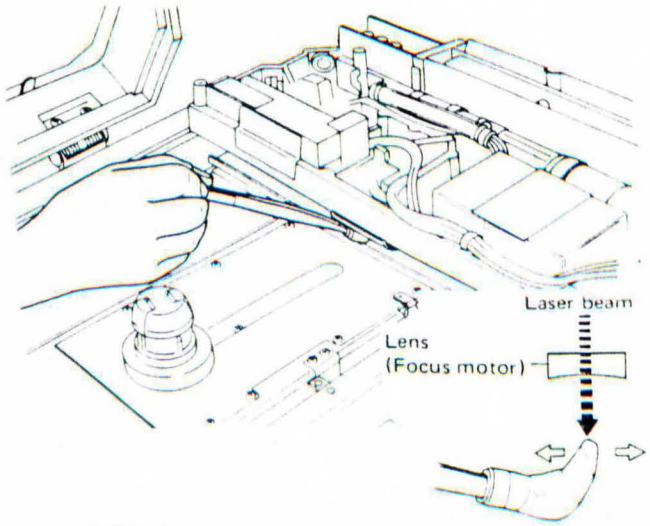


FIG 4

ADJUSTMENT:

All tracking and focus adjustments should be checked and adjusted as necessary.

REASSEMBLY:

Use care when installing Optical Platform Cover. All shielding sheets must be in place and in good condition. Re-assemble all covers as necessary.